

Remarks

No new matter is believed to be added to the application by this amendment.

Status of the Claims

Claims 1-3 and 5-21 are pending in the application. The amendments to claim 1 incorporate the subject matter of canceled claim 4. Support for the amendments to claim 13 and claims 19-21 can be found in paragraph [0033] of the specification.

Amended Drawings

Attached to this paper are amended drawing figures that are in accordance with 37 C.F.R. §1.84(i).

Rejection under 35 U.S.C. § 103(a) over the Applicant's Disclosure in view of Tran

Claims 1, 4-13 and 15-18 are rejected under 35 U.S.C. § 103(a) as being obvious over the Applicant's disclosure in view of Tran (U.S. Patent No. 5,135,581). Applicants traverse.

The Examiner uses the Applicant's disclosure for teachings pertaining to conventional liquid display devices. However, there has been no admission as to prior art in the Applicant's disclosure. "The court must be ever alert not to

read obviousness into an invention on the basis of the Applicant's own statements, that is, we must view the prior art without reading into that art appellant's teachings." In re Nomiya, 509 F.2d 566, 184 USPQ 607, 612 (CCPA 1975) (Figures in the application labeled "prior art" held to be admission that what was pictured was prior art relative to Applicant's invention). Therefore, basing a rejection on a description of the conventional art (used to define the problem being solved by the inventors) is improper. Accordingly, this rejection should be withdrawn for at least the above reasons alone.

The conventional art discussed in the specification fails to disclose or suggest "placing the substrate in a vacuum chamber and injecting hydrogen-containing gas at a temperature of less than about 400 °C." See independent claims 1 and 13. The Examiner admits to this failing of the conventional art discussed in the Applicant's disclosure.

The conventional art in the Applicant's disclosure additionally fails to disclose or suggest the substrate having a temperature of less than about 200 °C when forming the pixel electrode, as is set forth in the instantly amended independent claims. The conventional art discussed in the Applicant's disclosure further fails to disclose or suggest the substrate having a temperature between about 50 °C and about 150 °C when forming the pixel electrode. Yet further, the conventional art discussed in the Applicant's disclosure fails to disclose or suggest the temperature of the substrate being about half of the "less than about 400 °C" set point of the vacuum chamber.

The Examiner turns to the teachings of Tran for the formation of a light transmissive electrically conductive oxide precursor by sputtering in a stabilizing gas such as H₂ or H₂O. See Tran at column 2, lines 27-34. The Examiner turns to Tran at column 4, lines 23-32 for teachings pertaining to various sputtering temperatures between 20 °C and 300 °C.

Tran fails to teach anything about the temperature of the substrate. Tran additionally fails to teach anything about the temperature differential of the substrate. Tran further fails to teach or suggest that the substrate is about half of the 400 °C set point of the vacuum chamber.

Tran is further directed to a sputtering process performed at room temperature, i.e., 25 °C. Examples 1-4 at columns 8-9 of Tran were all performed at "room temperature." A person having ordinary skill would therefore be motivated by the teachings of the preferred embodiments of Tran to perform sputtering at room temperature and not utilize the elevated temperature differential of the claimed invention. Tran thus teaches away from the invention.

As a result, the combination of the Applicant's disclosure with Tran (even if it were proper) would fail to motivate a person having ordinary skill in the art to produce a claimed embodiment of the invention where "the pixel electrode is formed by placing the substrate in a vacuum chamber and injecting hydrogen-containing gas at a temperature of less than about 400 °C, wherein the substrate has a temperature of less than about 200 °C when forming the pixel

electrode." See independent claims 1 and 13. Claims dependent upon independent claims 1 and 13 are patentable for at least the above reasons. Thus, a *prima facie* case of obviousness has not been made over the Applicant's disclosure and Tran. Accordingly, this objection is overcome and withdrawal thereof is respectfully requested.

Rejection under 35 U.S.C. § 103(a) over the Applicant's Disclosure and Tran and further in view of Kaneko

Claims 2-3 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Applicant's disclosure and Tran as applied to claims 1, 4-12 and 15-18 (discussed above) and further in view of Kaneko (U.S. Patent No. 6,433,842). Applicant's traverse.

The Examiner turns to Kaneko at column 5, lines 47-51 for teachings pertaining to the utilization of amorphous ITO or IZO which allows for use of a weak-acid etchant. Kaneko at column 9, lines 28-43 discussed advantages of using a weak-acid etchant. However, Kaneko fails to address the inability of Tran and the Applicant's disclosure (if they could be combined) to suggest the temperature differential between the substrate and the set point of the temperature of the vacuum deposition.

As a result, the combination of the Applicant's disclosure, Tran and Kaneko, would fail to motivate a person having ordinary skill in the art to produce a claimed embodiment of the invention. Thus, a *prima facie* case of

obviousness has not been made over the Applicant's disclosure, Tran and Kaneko. Accordingly, this rejection is overcome and withdrawal thereof is respectfully requested.

Prior art made of record and not utilized by the Examiner

The prior art made of record in the application and not utilized by the Examiner shows the status of the conventional art which the invention supercedes. Accordingly, no further remarks are necessary.

Conclusion

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert E. Goozner, Ph.D. (Reg. No.42,593) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) respectfully petition(s) for a two (2) month extension of time for filing a reply in connection with the present application, and the required fee of \$410.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit


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Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or
under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By



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Attachments: Six (6) sheets of corrected formal drawings